B1005

II. EXECUTIVE SUMMARY

Project Title: Steelhead and Chinook Salmon Fish Passage Barrier Remediation on the Guadalupe River

Applicant Name: Natural Heritage Institute

Project Description and Primary Biological/Ecological Objectives

Fisheries scientists working as part of the Fisheries and Aquatic Habitat Collaborative Effort (FAHCE) Technical Advisory Committee (TAC), consisting of the Natural Heritage Institute, Santa Clara Valley Water District, California Department of Fish and Game, National Marine Fisheries Service, United States Fish and Wildlife Service, Guadalupe-Coyote Resource Conservation District, and City of San Jose, have compiled existing information on factors adversely impacting the availability and suitability of habitat for both salmon and steelhead within Guadalupe River. Based on this information, the TAC has recommended remediation of fish passage barriers on Guadalupe River at the Hillsdale Avenue Weir and San Jose Water Company's low-flow crossing. These two structures have been identified as impediments to the upstream migration of salmon and steelhead, restricting access to suitable spawning and juvenile-rearing areas located further upstream within the Guadalupe River and its tributaries. The proposed fish passage facilities directly address one of the nine specific topics identified for CALFED funding (fish passage improvements) and two of the identified CALFED target species (steelhead and fall-run chinook salmon).

Approach/Tasks/Schedule

The proposed scope of work for this project will be completed in four phases: Phase I-Project Planning, Phase II-Project Permitting, Phase III-Construction, and Phase IV-Project Monitoring. A detailed work breakdown including major tasks, costs, and schedule is included in Section V.

Justification for Project and Funding by CALFED

This project is expected to result in improvements in fish passage and increased access to spawning and rearing habitat that is consistent with the goals and objectives of the CALFED Ecosystem Restoration Program Plan (ERPP). Construction of fish passage facilities in this proposal complement the more comprehensive fisheries investigations and efforts currently underway as part of the FAHCE to improve overall habitat conditions for salmon and steelhead within Guadalupe River, Coyote, and Stevens Creeks.

Budget Costs and Third Party Impacts

The total budget for this project is estimated at $317,140. We are requesting funding assistance for Phase III-Construction which is estimated at $178,200. A detailed breakdown is provided in Section V.

Applicant Qualifications

The lead applicant for this project is NHI. Other applicants working in collaboration on this project include GCRCD, District, Department, NMFS, USFWS, and City of San Jose.

Together these agencies have experience in land and water resource conservation; water management; design and operation of water projects; design, monitoring, evaluation, and construction of fish passage facilities; monitoring of biological resources and habitat conditions; protection of existing fisheries resources; and evaluation of projects to improve fish and wildlife resources and avoid impacts to steelhead and salmon. For a complete description of individual applicant qualifications, see Section VI.

Monitoring and Data Evaluation

Monitoring and evaluation of the fish passage facilities will include: (1) verification and documentation of as-built passage facilities; (2) field measurements of channel width, water depth, and water velocity over a range of three flow conditions; (3) comparison of actual field hydraulic measurements with fish passage facility design criteria; (4) monitoring of sediment deposition, bank erosion, and channel stability; (5) monitoring of debris accumulation, and required maintenance; and (6) biological observations of adult salmon and steelhead upstream migration.

A technical report will be prepared within one year of completing construction of the fish passage facilities. The technical report will evaluate performance of the fish passage facilities based on a comparison of actual hydraulic measurements and original design criteria for the fish passage facilities.

Local Support/Coordination with Other Programs/Compatibility with CALFED Objectives

The Steelhead and Chinook Salmon Fish Passage Barrier Remediation project represents an outcome of the FAHCE. In addition to the extensive collaboration from local water agencies, municipalities, resource conservation districts, environmental groups, and state and federal resource agencies which FAHCE represents–there is also support and coordination with other local efforts.

FAHCE has maintained ongoing coordination with the Guadalupe Collaborative (a collaborative effort to resolve Guadalupe River flood control issues) and the Regional Water Quality Control Board's Watershed Management Initiative. This project has support by local environmental groups (Attachments 1a and 1b).

This project is consistent with the goals and objectives of the "Summary of Visions for Ecosystem Elements" in CALFED's ERPP, Volume 1 (Attachment 2).